REMARKS

In summary, 62 claims numbered 1-20, 23-25 and 37-65 are pending. Claims 1, 12, 26, 40, 46, and 60 are independent. Claims 1-4, 6, 12, 14-20, 26, 30-32, 35, 37, 40, 43-45, 46, 50-52, 55-57, 60, and 63-65 are hereby amended without adding new matter. Support for claim amendments can be found throughout Applicants' application. Claims 1-4, 6, 12, 14-20, 26, 30-32, 35, 37, 40, 43-45, 46, 50-52, 55-57, 60, 63-65 are hereby amended without adding new matter. For amendments pertaining to symbolic representation of the business process in a GUI (e.g., from design and stored tracking information) or user interaction with the GUI, see, e.g., FIGS. 4, 6A and 6B as well as paragraphs 0013, 0014, 0062, 0063, 0064, 0068, 0069, 0075, 0076, 0090, 0093, 0095, 0100, 0101 and 0102 in the Published Application. With regard to claim 2, see, e.g., paragraph 0089 of the Published Application. With regard to claim 18, see, e.g., FIG. 4 (425) and paragraph 0072 of the Published Application. With regard to claim 20, see, e.g., FIG. 4 (435) and paragraph 0075 of the Published Application. Claims 40-44 and 60-64, as previously presented, are rejected under 35 U.S.C. § 102. Claims 1-20, 23-25, 37-39, 45-59 and 65, as previously presented, are rejected under 35 U.S.C. § 103. Applicants respectfully traverse all rejections. Reconsideration in view of the foregoing amendments and following remarks is respectfully requested.

Telephone Conversation With Examiner

Applicants' representatives thank Examiner Wang for the telephone conducted on April 10, 2008. Proposed claim amendments were discussed. No agreements were reached.

Rejection of Claims 40-44 and 60-64 under 35 U.S.C. § 102(b)

Claims 40-44 and 60-64 are rejected under 35 U.S.C. § 102(b) as being anticipated by "BizTalk Unleashed," 1st ed., authored by Adams *et al.* (hereinafter referred to as "Adams"). (Office Action, ¶¶ 1-8). Applicants respectfully traverse the rejection.

Adams fails to teach or suggest independent claims 40 and 60:

A method in a computer system for displaying on a display device a graphical debugging environment for a business process service, the method comprising:

              obtaining design information about the business process service;
              obtaining tracking information about execution of the business process
service;
              generating a symbolic representation of the operation of the business
process service according to the design information and tracking information;
and
              displaying on the display device a graphical debugging environment
showing the symbolic representation.

Independent claim 40, as amended; see also claim 60, as amended.

In contrast to the claimed subject matter pertaining to displaying a graphical debugging environment for a business process service, the Office Action vaguely cites to: [A] Adams, Chapter 10 ("Using the BizTalk Orchestration Designer"), Section "Implementing Business Processes," Fig. 10.1; and [B] Adams, Chapter 8 ("Document Tracking"), Sections "Developing Custom Tracking Solutions" and "A Custom Tracking Solution."

The aforementioned citations do not pertain to debugging, let alone the claimed subject matter, as presently or previously claimed. The preamble was previously not addressed. To alleviate this, terminology in the preamble is repeated in the body of claims 40 and 60.

Independent claims 40 and 60, as well as the claims that depend on them, i.e., claims 41-45 and 61-65, are patentable over Adams. As such, Applicants respectfully request withdrawal of the rejection.

Rejection of Claims 1-20, 23-35, 37-39, 45-59 and 65 under 35 U.S.C. § 103(a)

Claims 1-20, 23-35, 37-39, 45-59, and 65 are rejected under 35 U.S.C. § 103(a) as being unpatentable over various combinations of: (1) "BizTalk Orchestration: Transactions, Exceptions, and Debugging," Feb. 2001, authored by Roxburgh (hereinafter referred to as "Roxburgh"): (2) "Debugging in Visual Studio.NET," Jan. 2002, authored by Chaudhuri *et al.* (hereinafter referred to as "Chaudhuri"); and (3) Adams. Applicants respectfully traverse all rejections.

Rejection of Claims 1-7 & 9-11 based on Roxburgh & Chaudhuri.

Claims 1-7 and 9-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Roxburgh in view of Chaudhuri. Applicants respectfully traverse the rejection.

Roxburgh and Chaudhuri fail to teach or suggest independent claim 1:

> A business process service debugger for remotely debugging a business process service, comprising:
>   means for establishing a communications connection with a remote computer, wherein the remote computer is implementing the business process service;
>   means for reading stored state information regarding events related to at least one business process implemented for the business process service;
>   means for displaying a symbolic representation of the operation of the business process service based on the stored state information; and
>   means for remotely debugging the business process service using the symbolic representation, communications connection and stored state information.

Independent claim 1, as amended.

Roxburgh teaches away from the claimed subject matter of claims 1-7 and 9-11. Roxburgh, § "Debugging Components in Schedules" at p. 16 ("schedules themselves can't be loaded into a visual environment and debugged."); Roxburgh, § "Debugging Schedules" at p. 14 ("Microsoft BizTalk Server does not provide a graphical debugging facility for orchestration schedules. However, remember that orchestration schedules represent a different kind of executable process from traditional short-lived synchronous processes, so the traditional debugging model alone is not effective. . . . When the orchestration schedule is compiled and then executed, typically multiple instances of the schedule will be initiated as individual (long-running) executable processes.").

"A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." In re Gurley, 27 F.3d 551, 553 (Fed. Cir., 1994).

Clearly, since Microsoft personnel such as Roxburgh thought it was not possible, a person of ordinary skill would be discouraged from the claimed subject matter. This

disclosure in Roxburgh teaching away from the claimed invention cannot be ignored because each "prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." M.P.E.P. § 2141.02 VI. "It is improper to combine references where the references teach away from their combination." M.P.E.P. § 2145 X.D.2.

It is respectfully submitted that independent claim 1, and all claims that depend thereon, are patentable over Roxburgh in view of Chaudhuri. Therefore, Applicants respectfully request withdrawal of the rejection.

Rejection of Claims 8, 12-20, 23-35, 37-39, 46-59 based on Roxburgh, Chaudhuri & Adams.

Claims 8, 12-20, 23-35, 37-39, 46-59 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Roxburgh in view of Chaudhuri and Adams. Applicants respectfully traverse the rejection.

Roxburgh, Chaudhuri and Adams fail to teach or suggest independent claims 12, 26, and 46:

> A system for remotely debugging a distributed transactional application, comprising:
>   a server configured to execute an instance of a business process service comprising a plurality of business processes, thereby generating runtime data;
>   a client computer configured to execute a debugging user interface (UI) process that establishes a communications connection with the server requests runtime data for at least one of the plurality of business processes, and generates a symbolic representation of the business service process showing any debugging break points specified by a user; and
>   an interceptor for monitoring the runtime data and, when a specified break point is identified, causing the server to enter or leave a debugging state.

Independent claim 12, as amended.

> A method for debugging an instance of a business process service running on a remote computer, comprising:
>   generating for display, in a graphical user interface (GUI), a symbolic representation of the business process service based on a correlation of information about the design and execution of the business process service;

         receiving a debugging command generated by a user interacting with the GUI;

         establishing a direct client connection channel with the remote computer;

         causing an interceptor to monitor runtime data generated by the instance of the business process service in accordance with the debugging command;

         receiving a runtime request, generated by a user interacting with the GUI, for event information generated by execution of the instance of the business process service;

         sending the runtime request to the remote computer for processing by the remote computer.

Independent claim 26, as amended.

       A computer-readable storage medium having computer-executable instructions for performing a method for debugging an instance of a business process service running on a remote computer, comprising:

         generating for display, in a graphical user interface (GUI), a symbolic representation of the business process service based on a correlation of information about the design and execution of the business process service;

         receiving a debugging command generated by a user interacting with the GUI;

         establishing a direct client connection channel with the remote computer;

         causing an interceptor to monitor runtime data generated by the instance of the business process service in accordance with the debugging command;

         receiving a runtime request; and

         sending the runtime request to the remote computer for processing by the remote computer.

Independent claim 46, as amended.

       Roxburgh, teaches away from the subject matter of claims 8, 12-20, 23-35, 37-39, and 46-59. Roxburgh, § "Debugging Components in Schedules" at p. 16 ("schedules themselves can't be loaded into a visual environment and debugged."); Roxburgh, § "Debugging Schedules" at p. 14 ("Microsoft BizTalk Server does not provide a graphical debugging facility for orchestration schedules. However, remember that orchestration schedules represent a different kind of executable process from traditional short-lived synchronous processes, so the traditional debugging model alone is not effective. . . . When the

orchestration schedule is compiled and then executed, typically multiple instances of the schedule will be initiated as individual (long-running) executable processes.").

"A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." In re Gurley, 27 F.3d 551, 553 (Fed. Cir., 1994).

Clearly, since Microsoft personnel such as Roxburgh thought it was not possible, a person of ordinary skill would be discouraged from the claimed invention. This disclosure in Roxburgh teaching away from the claimed invention cannot be ignored because each "prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." M.P.E.P. § 2141.02 VI. "It is improper to combine references where the references teach away from their combination." M.P.E.P. § 2145 X.D.2.

It is respectfully submitted that independent claims 12, 26, and 46, and all claims that depend thereon, i.e., claims 13-20, 23-25, 27-35, 37-39, 47-59, are patentable over Roxburgh in view of Chaudhuri and Adams. Therefore, Applicants respectfully request withdrawal of the rejection.

Rejection of Claims 45 & 65 based on Adams & Chaudhuri.

Claims 45 and 65 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams in view of Chaudhuri. Applicants respectfully traverse the rejection.

Claims 45 and 65 depend on independent claims 40 and 60, the patentability of which was previously addressed herein. At least for the reasons previously asserted herein with respect to claims 40 and 60, claims 45 and 60 are also patentable over Adams in view of Chaudhuri. Therefore, Applicants respectfully request withdrawal of the rejection.

Amendments made herein as well as amendments previously made are without abandonment of subject matter. Applicant expressly reserves the right to, in the pending application or any application related thereto, reintroduce any subject matter removed from

the scope of claims by any amendment and introduce any subject matter not present in

current or previous claims.

CONCLUSION

In view of the foregoing remarks and amendments, it is respectfully submitted that this application is in condition for allowance. Reconsideration of this application and an early Notice of Allowance are requested. Applicants desire to hold a telephone interview with the Examiner and his supervisor following their review of this reply.

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